

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claims 6, 9 and 17 in accordance with the following:

1. (Previously Presented) A sound signal recognition system, comprising:
 - a sound signal input part receiving a sound signal including one of either a voice signal or a DTMF signal, or both;
 - a sound signal analyzing part calculating a feature value by conducting an acoustic process for each segment of a sound signal;
 - a matching part including a voice signal model and a DTMF signal model, matching the feature value, calculated by the sound signal analyzing part, with both the voice signal model and the DTMF signal model, and producing a matching result;
 - a sound signal recognizing part, including a language model, recognizing the sound signal by using the matching result of the matching part and the language model, and selecting a better result by comparing the matching result using the voice signal model with the matching result using the DTMF signal model in the matching part for each segment of a sound signal, wherein a sound signal recognition process is conducted with respect to the sound signal including either the voice signal or the DTMF signal, or both; and
 - an integrating part connecting sound signal recognition results selected by the sound signal recognizing part and integrating them as a total sound signal recognition result with respect to all the sections of the input sound signal.
3. (Previously Presented) The sound signal recognition system according to claim 1, wherein the language model is capable of including a DTMF signal as sound signal recognition vocabulary.
4. (Previously Presented) The sound signal recognition system according to claim 1, further comprising:
 - a guidance part providing a user, who performs sound signal input via the sound signal input part, with guidance on whether a specific vocabulary is to be input as a voice signal

or a DTMF signal.

5. (Previously Presented) A dialog control system including a sound signal recognition system of claim 1, which controls a dialog flow with a user, based on a sound signal recognition result according to the sound signal recognition system.

6. (Cancelled)

7. (Previously Presented) The sound signal recognition system according to claim 6, further comprising:

a guidance part providing a user, who performs sound signal input via the sound signal input part, with guidance on whether a specific vocabulary is to be input as a voice signal or a DTMF signal.

8. (Previously Presented) A dialog control system including a sound signal recognition system of claim 6, which controls a dialog flow with a user, based on a sound signal recognition result according to the sound signal recognition system.

9. (Cancelled)

10. (Previously Presented) The sound signal recognition system according to claim 9, wherein upon detecting that a misidentification rate of a sound signal inputted by a voice for a specific vocabulary is high under predetermined conditions, an integrating part notifies the guidance part of instruction information on outputting guidance regarding asking the user to conduct re-input of the sound signal by a DTMF signal for the specific vocabulary.

11. (Previously Presented) A dialog control system including a sound signal recognition system of claim 10, which controls a dialog flow with a user, based on a sound signal recognition result according to the sound signal recognition system.

12. (Previously Presented) The sound signal recognition system according to claim 9, wherein the integrating part estimates and holds a misidentification rate in the matching result.

13. (Previously Presented) A dialog control system including a sound signal recognition system of claim 12, which controls a dialog flow with a user, based on a sound signal recognition result according to the sound signal recognition system.

14. (Previously Presented) The sound signal recognition system according to claim 9, wherein the guidance part notifies a user of correspondence between a DTMF signal and a vocabulary in advance.

15. (Previously Presented) A dialog control system including a sound signal recognition system of claim 14, which controls a dialog flow with a user, based on a sound signal recognition result according to the sound signal recognition system.

16. (Previously Presented) A dialog control system including a sound signal recognition system of claim 9, which controls a dialog flow with a user, based on a sound signal recognition result according to the sound signal recognition system.

17. (Cancelled)

18. (Previously Presented) A sound signal recognition method, comprising:
inputting a sound signal including one of either a voice signal or a DTMF signal, or both;
calculating a feature value by conducting an acoustic process for each segment of the sound signal;
matching the feature value with both a voice signal model and a DTMF signal model, and producing a matching result;
recognizing the sound signal by using the matching result and a language model;
selecting a better result by comparing the matching result using the voice signal model with the matching result using the DTMF signal model for each segment of a sound signal;
conducting a sound signal recognition process with respect to the sound signal including one of either the voice signal or the DTMF signal, or both; and
connecting sound signal recognition results, selected by said selecting a better result, and integrating them as a total sound signal recognition result with respect to all the sections of the input sound signal.

19. (Previously Presented) A dialog control method including the sound signal

recognition method of claim 18, which controls a dialog flow with a user, based on a sound signal recognition result using the sound signal recognition method.

20. (Previously Presented) A computer-readable recording medium storing a sound signal recognition program for executing a sound signal recognition process with respect to an input sound signal including either one selected from a voice signal section and a DTMF signal section or both sections, the program controlling a computer by:

- inputting a sound signal including one of either a voice signal or a DTMF signal, or both;
- calculating a feature value by conducting an acoustic process for each segment of the sound signal;

- matching the calculated feature value with both a voice signal model and a DTMF signal model;

- selecting a better result by comparing the matching result using the voice signal model with the matching result using the DTMF signal model for each segment of a sound signal;

- performing recognition of the sound signal by using a language model based on a matching result, the language model including a word dictionary and grammar; and

- connecting sound signal recognition results, selected by said selecting a better result, and integrating them as a total sound signal recognition result with respect to all the sections of the input sound signal.